

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2007-XXXX

INDIVIDUAL WASTE DISCHARGE REQUIREMENTS
FOR
HENRY JONGSMA, DBA HENRY JONGSMA AND SON DAIRY
GLENN COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Board) finds that:

A. Findings

Facility Owner & Location

1. The Henry Jongsma and Son Dairy (hereafter "facility") is owned and operated by Henry Jongsma (hereafter "Discharger") and is located in the southwestern portion of Section 9, Section 16, and the southwestern portion of Section 15. Township 21W, Range 2S, Mount Diablo Base & Meridian, at 3724 County Road S in Orland, Glenn County (see Attachment A, which is hereby made part of this Order).
2. The facility has been in operation since May 2007.

Facility Description

3. The Discharger milks 1,700 cows, and has 290 dry cows, 840 one-to-two-year heifers, and 560 three-to-twelve month calves for a total herd size of 3,390 Holstein animals. No baby calves are housed at the facility. The maximum herd size at the facility is 3,390 animals based on the final Environmental Impact Report. The maximum number of animals in each age category will not exceed the numbers given in this Finding. The facility produces approximately 11,900 gallons of milk per day.
4. The Discharger owns 979 total acres where the facility is located. Land under agricultural production at the facility consists of 711 acres located on Assessor's Parcel Numbers 012-160-001, 023-160-002, 023-150-011, and 012-150-012. Six hundred acres of the cropland are doubled cropped in corn and wheat, 40 acres is cropped in alfalfa, and 148 acres is in pasture. The Discharger applies liquid waste to all the cropland at the facility except for the alfalfa. Manure solids are used for bedding or given to local farmers in the Glenn County area as fertilizer.

5. The remaining 191 acres are used for the dairy production area, including corrals, freestall barns, loafing barns, milking parlor, holding pens, manure storage and drying areas, settling ponds, and the storage lagoon (See Attachment B).
6. The facility is located outside the 100-year floodplain.

Waste Production

7. Waste produced at the facility consists of wastewater from facility wash down operations and storm water containing manure, urine, milk products, spoiled feed material, bedding (litter), soil, and cleaning compounds. Solid wastes are also produced at the facility and primarily consist of manure with additional fractions of spoiled feed, bedding material and soil.
8. An estimated 93,500 gallons per day (gpd) of clean water from the on-site water supply wells is used to wash down the holding pen, wash pen, and milking parlor floors, rinse the cows, and wash down miscellaneous dairy equipment.

Wastewater Ponds

9. Wastewater generated at the facility is conveyed to two lined settling ponds, which are side by side to settle out solids material from the flushing of the freestall barns. Wastewater then gravity flows into the main storage lagoon, before it is used for irrigation of the land application area. An estimated 24,520 gpd of effluent are recycled from the storage lagoon to flush the lanes. Wastewater from the flush lanes flows via gravity into the settling ponds at the facility.
10. The facility has two settling ponds, one main storage lagoon, and an emergency overflow lagoon for storm water. The two settling ponds and main storage lagoon are lined with a 36 mil scrim-reinforced polypropylene liner.
11. The main lagoon has been constructed to handle runoff from storm events above and beyond a 25-year, 24-hour storm as long as the storage lagoon is properly managed throughout the year.

Groundwater Monitoring

12. The Discharger has installed a monitoring well system to characterize groundwater flow direction and gradient beneath the site, characterize natural background (unaffected by the Discharger or others) groundwater quality upgradient of the facility, and characterize groundwater quality downgradient of the corrals, downgradient of the storage lagoon, and downgradient of the land application area. In addition, the Discharger monitors existing domestic and agricultural production wells for changes in water quality.

Land Application Area

13. Wastewater generated at the facility is applied to land owned and/or operated by the dairy at agronomic rates as described in the certified Nutrient Management Plan (Attachment C). Any manure solids applied to land application areas will be applied at agronomic rates as described in the certified Nutrient Management Plan.
14. All land application areas have tailwater recovery systems.
15. All fields, ditches, and pipelines exposed to wastewater are flushed with clean water during the last irrigation or usage of the season to remove any waste residue.

California Environmental Quality Act

16. A Draft Environmental Impact Report (EIR) for this project was submitted to the Glenn County Planning and Public Works Department on 15 August 2005. A Final EIR was submitted to the Glenn County Planning and Public Works Department on 1 January 2006. The Final EIR and Conditional Use Permit #2004-01 were approved on 15 February 2006.

General Findings

17. This Order regulates the storage, management, and disposal of wastes on the dairy production area and land application area to protect the beneficial uses of underlying ground water and the surface waters that receive discharges from the facility.
18. For the purposes of this Order, "waste" includes, but is not limited to, manure, leachate, wastewater and any water, precipitation or rainfall runoff that contacts raw materials, products, or byproducts such as manure, compost piles, feed, silage, milk, or bedding. Wastewater is defined as water directly or indirectly used in operation of a milk cow dairy for any or all of the following; washing, cleaning, or flushing pens, barns, manure pits, or other dairy facilities; washing or spray cooling of animals; or dust control and includes any water or precipitation and precipitation runoff which comes into contact with any raw materials, products, or byproducts including, feed, milk, or bedding. Storm water is defined as storm water runoff, surface runoff, and drainage.
19. This Order does not authorize violation of any federal, state, or local law or regulation. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the Discharger from his liabilities under federal, state, or local law.
20. As stated in California Water Code Section 13263(g), the discharge of waste into waters of the State is a privilege, not a right, and this Order does not create a vested right to continue the discharge of waste. Failure to prevent conditions that create or threaten to create pollution or nuisance will be sufficient reason to modify, revoke, or enforce this Order, as well as prohibit further discharge.

21. If not controlled or retained, surface water drainage from the area flows to Walker Creek, and then the Sacramento River. Beneficial uses of the Sacramento River are: industrial supply, agricultural supply, recreation, fresh water habitat, fish migration, fish spawning, and wildlife habitat.
22. Beneficial uses of groundwater in the surrounding area are domestic, municipal, industrial, and agricultural supply.
23. The Board has adopted a Water Quality Control Plan, Fourth Edition, for the Sacramento River Basin, which contains water quality objectives for all waters of the Basin. These requirements are consistent with the Plan.
24. These requirements are consistent with Title 27, Division 2, Chapter 7, Subchapter 2, California Code of Regulations, regulating confined animal facilities.
25. On **day/month/year**, the Board notified the discharger and interested parties of its intent to issue Waste Discharge Requirements for this discharge and has provided them with a copy of the proposed Order and an opportunity to submit written comments.
26. After considering all comments pertaining to this Order during a public hearing on **month/day/year** this Order was found consistent with the above findings.

IT IS HEREBY ORDERED that Henry Jongsma, dba Henry Jongsma and Son Dairy, its owners, tenants, agents, successors, and assigns, pursuant to California Water Code Sections 13260, 13263, and 13267 and in order to meet the provisions contained in Division 7 of the California Water Code and regulations and policies adopted thereunder shall comply with the following;

B. Prohibitions

1. The discharge of waste other than as defined in General Finding 18 above or from septic tanks, or of hazardous waste, as defined in the California Water Code Section 13173 and Title 23 CCR Section 2521 (a), respectively, is prohibited. The disposal of waste not generated by on-site animal production activities as defined in General Finding 15, above, is prohibited unless a Report of Waste Discharge for the disposal has been submitted to the Executive Officer and the Central Valley Water Board has issued or waived waste discharge requirements (WDRs).
2. The direct or indirect discharge of waste and/or storm water from the production area to surface waters is prohibited.
3. The discharge of wastewater to surface waters from a land application area is prohibited. Irrigation supply water that comes into contact or is blended with waste or wastewater shall be considered wastewater under this Prohibition.

4. The discharge of storm water to surface water from a land application area where manure or wastewater has been applied is prohibited unless the land application area has been managed consistent with a certified Nutrient Management Plan.
5. The application of wastewater to a land application area before, during, or after a storm event that would result in runoff of the applied water is prohibited.
6. The discharge of waste from the facility to surface waters which causes or contributes to an exceedance of any applicable water quality objective in the Basin Plan or any applicable state or federal water quality criteria, or a violation of any applicable state or federal policies or regulations is prohibited.
7. The collection, treatment, storage, discharge or disposal of waste from the facility that results in pollution or nuisance is prohibited.
8. The disposal of dead animals in any liquid manure or wastewater system is prohibited. The disposal of dead animals at the facility is prohibited except when federal, state or local officials declare a State of Emergency and where all other options for disposal have been pursued and failed and the onsite disposal complies with all state and local policies for disposal of dead animals.
9. All animals shall be prohibited from entering any surface water within the animal confinement area (Title 27 CCR Section 22561).
10. The application of waste to lands not owned, leased, or controlled by the Discharger without written permission from the landowner or in a manner not approved by the Executive Officer, is prohibited.
11. The land application of manure or wastewater to land application areas for other than nutrient recycling is prohibited.
12. The use of manure to construct containment structures or to repair, replace, improve, or raise existing containment structures is prohibited.
13. The direct discharge of wastewater into groundwater via backflow through water supply or irrigation supply wells is prohibited.

C. Specifications

Waste Discharge Specifications

1. The collection, treatment, storage, discharge, or disposal of wastes at the facility shall not result in: (1) discharge of waste constituents in a manner which could cause degradation of surface water or groundwater, (2) contamination or pollution of surface water or groundwater, (3) a condition of nuisance, (4) exceedance of water

quality objectives, or (5) unreasonably affect beneficial uses (as defined by the California Water Code Section 13050).

2. The facility shall have lagoons and conveyance structures that are designed, constructed, operated, and maintained to retain all facility wastewater generated during the storage period (maximum period of time anticipated between land application of wastewater), together with all precipitation on and drainage through manured areas, up to and including during a 25-year, 24-hour storm.
3. Ponds, lagoons, and manured areas at the facility shall be protected from inundation or washout by overflow from any stream channel during 100-year peak stream flows (Title 27 Section 22562(c)).
4. The level of waste in the settling ponds and storage lagoon at the facility shall be kept a minimum of two (2) feet from the top of each pond. Less freeboard may be approved by the Executive Officer when a Civil Engineer who is registered pursuant to California law, or other person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work, demonstrates that the structural integrity of the pond will be maintained with the proposed freeboard.
5. Settling ponds and the storage lagoon at the facility, and the temporary storm water storage pond (if used), shall be managed and maintained to prevent breeding of mosquitoes and other vectors. In particular,
 - a. Small coves and irregularities shall not be allowed around the perimeter of the water surface;
 - b. Weeds shall be minimized through control of water depth, harvesting, or other appropriate method;
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface; and
 - d. Management shall be in accordance with the requirements of the Mosquito Abatement District.
6. All precipitation and surface drainage from outside of the facility (i.e., "run on") shall be diverted away from any manured areas unless such drainage is fully contained (Title 27 Section 22562(b)).
7. Ponds and lagoons designated to contain the 25-year, 24-hour storm event runoff must have a depth marker that clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation from a 25-year, 24-hour storm event.
8. All roofs, buildings, and non-manured areas located in the production area at the facility shall be constructed or otherwise designed so that clean rainwater, including

roof drainage, is diverted away from manured areas, including corrals and waste containment facilities, unless such drainage is fully contained in the wastewater retention system (Title 27 Section 22562(b)).

9. The milk parlor, animal confinement area (including corrals), and manure and feed storage areas shall be designed and maintained to convey all water that has contacted animal wastes or feed to the wastewater retention system and to minimize standing water and the infiltration of water into the underlying soils. The Discharger shall, at a minimum of once per year, backfill any slope loss with compacted, non-manured material to maintain pre-existing slopes.
10. Unlined ditches, swales, and/or earthen-berm channels may not be used for storage of wastewater, manure, or tailwater and may only be used for conveyance of wastewater collected in the production area to the settling ponds or storage lagoon, conveyance of wastewater from the storage lagoon to the land application area, irrigation return water management, or temporary control of accidental spills.

Land Application Specifications

11. Land application of all waste from the facility shall be conducted in accordance with a certified Nutrient Management Plan. Land application of wastes at the facility shall not degrade underlying groundwater or cause the underlying groundwater to contain any waste constituent, degradation product, or any constituent of soil mobilized by the interactions between applied waste and soil or soil biota, to exceed the groundwater limitations set forth in this Order. The Nutrient Management Plan shall be modified within 90 days if monitoring shows that discharge from the land application is degrading ground water or fails to comply with surface water quality objectives or criteria. The modifications must be designed to bring the facility into compliance with this Order.
12. The Discharger shall have a written agreement with each third party that receives wastewater from the Discharger for its own use. Each written agreement shall be included in the Discharger's Nutrient Management Plan and Annual Report. The written agreement(s) shall be effective until the third party is covered under waste discharge requirements or a waiver of waste discharge requirements that are adopted by the Central Valley Water Board and that are specific to the application of the Discharger's wastewater to land under the third party's control. The written agreement shall:
 - a. Clearly identify:
 - i. The Discharger and dairy facility from which the wastewater originates,
 - ii. The third party that will control the application of the wastewater to land application areas,

- iii. The Assessor's Parcel Number(s) and the acreage(s) of the land application areas where the wastewater will be applied, and
 - iv. The types of crops to be fertilized with the wastewater.
- b. Include an agreement by the third party to:
- i. Use the wastewater at agronomic rates appropriate for the crops to be grown, and
 - ii. Prevent the runoff to surface waters of wastewater, storm water or irrigation supply water that has come into contact with manure or is blended with wastewater.
- c. Include a certification statement, as specified in General Reporting Requirements C.7 of the Standard Provision and Reporting Requirements (which is attached to and made part of this Order), which is signed by both the Discharger and third party.
13. The application of waste to land application areas shall be at rates that preclude development of vectors or other nuisance conditions and meet the conditions of the certified Nutrient Management Plan. Application shall be timed to minimize nitrogen movement below the root zone.
14. Land application areas that receive dry manure shall be managed through implementation of erosion control measures to minimize erosion and must be consistent with a certified Nutrient Management Plan.
15. All wastewater applied to land application areas must infiltrate completely within 72 hours after application.
16. Wastewater shall not be applied to land application areas during periods when the soil is at or above field moisture capacity unless consistent with a certified Nutrient Management Plan.
17. Manure and wastewater shall not be applied closer than 100 feet to any down gradient surface waters, open tile line intake structures, sinkholes, or other conduits to surface waters, unless a 35-foot wide vegetated buffer or physical barrier is substituted for the 100-foot setback or alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions achieved by the 100-foot setback. Manure and wastewater shall not be applied, and corrals and wastewater ponds shall not be located, closer than 100 feet to any agricultural or domestic well. If existing agricultural or domestic wells are located less than 100 feet from where wastewater will be applied, the wells must have casing seals at least 50 feet deep.

18. Animal waste (manure solids) shall not be applied for disposal to any land that is not being used to grow crops. Crops must be planted within one month of waste application.
19. Waste and land application areas shall be managed to prevent contamination of crops grown for human consumption. The term "crops grown for human consumption" refers only to crops that will not undergo subsequent processing which adequately removes potential microbial danger to consumers.

D. Provisions

1. The Discharger shall comply with the *Standard Provisions and Reporting Requirements for Individual Waste Discharge Requirements for Dairies in the Sacramento and San Joaquin River Basins* (Standard Provisions) dated **[date of adoption of Order]**, which is attached to and made part of this Order.
2. The Discharger shall comply with all applicable provisions of the California Water Code, Title 27 CCR, and the applicable Water Quality Control Plans.
3. The Discharger shall comply with the attached Monitoring and Reporting Program No. ____ which is part of this Order, and future revisions thereto as specified by the Board or the Executive Officer.
4. The number of animals shall not be increased above the maximum herd size stated in Finding No. 3 until the Discharger submits a new Report of Waste Discharge (ROWD) and the Regional Board has issued new Waste Discharge Requirements. The ROWD shall clearly demonstrate that the increase in animals will not constitute a threat to water quality.
5. The Discharger shall submit a complete Report of Waste Discharge in accordance with the California Water Code Section 13260 at least 140 days prior to any material change or proposed change in the character, location, or volume of the discharge, including any expansion of the facility or development of any treatment technology, or construction of an anaerobic digester.
6. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Board.
7. The Board will review this Order periodically and may revise requirements when necessary.
8. If site conditions threaten to violate Specification C.1 or Prohibition B.2, the Discharger shall take immediate action to preclude the violation, documenting the condition and all corrective actions. Such actions shall be summarized in the annual

monitoring report. Alterations of the Waste Management Plan (see Required Reports and Notices F.1.b) for the production area to avoid a recurrence shall be submitted as a modification to the Waste Management Plan.

9. If a discharge of waste creates, or threatens to create, significant objectionable odors or nuisance odor and vector conditions, enforcement and/or revocation of coverage under this Order may result.
10. The Discharger shall comply with all requirements of this Order and all terms, conditions, and limitations specified by the Executive Officer.
11. Any instance of noncompliance with this Order constitutes a violation of the California Water Code and its regulations. Such noncompliance is grounds for enforcement action, and/or termination of the authorization to discharge.
12. The Discharger must maintain coverage under this Order or a subsequent revision to this Order until all manure, wastewater, and animal waste impacted soil, including soil within the retention pond(s), is disposed of or utilized in a manner which does not pose a threat to surface water or groundwater quality or create a condition of nuisance. At least 90 days before seeking to terminate coverage under this Order, the Discharger must submit to the Executive Officer a closure plan that ensures protection of surface water and groundwater. No more than 30 days after completion of site closure, the Discharger shall submit a closure report which documents that all closure activities were completed as proposed and approved in the closure plan. Coverage under this Order will not be terminated until cleanup is complete.
13. This Order shall become effective upon adoption by the Board.
14. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Accordingly, the Discharger shall submit to the Board on or before each report due date the specified document or, if an action is specified, a written report detailing evidence of compliance with the task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board by letter when it returns to compliance with the time schedule. Violations may result in enforcement action, including Board or court orders requiring corrective action or imposing civil monetary liability.
15. Technical reports (Monitoring Well Installation and Sampling Plan, Monitoring Well Installation Completion Report, Groundwater Monitoring Report, Waste Management Plan Certification, and portions of the Waste Management Plan) required by this Order must be certified by an appropriately licensed professional as required in this Order and its Attachments. If the Executive Officer provides comments on any technical report, the Discharger will be required to address those comments.

16. The Discharger shall maintain a copy of this Order at the site so as to be available at all times to site-operating personnel. The Discharger, landowner and his/her designee shall be familiar with the content of this Order.

E. Permit Reopening, Revision, Revocation, and Re-Issuance

1. If more stringent applicable water quality standards are adopted in the Basin Plan, the Board may revise and modify this Order in accordance with such standards.
2. This Order may be reopened to address any changes in state plans, policies, or regulations that would affect the water quality requirements for the discharges and as authorized by state law.

F. Required Reports and Notices

- I. Dischargers must prepare and submit the following pursuant to Water Code Section 13267 in accordance with this Order:
 - a. The Discharger shall submit Annual Reports, Groundwater Reports, and Storm Water Reports as described in the Monitoring and Reporting Program.
 - b. **Waste Management Plan:** The Discharger has submitted a Waste Management Plan that describes and evaluates the facility's design, construction, operation, and maintenance for flood protection and waste containment. If, in the course of operation the Discharger or the Board determines that the design, construction, operation, and/or maintenance of the dairy facility is not protective of water quality, the Discharger must notify the Board and propose modifications and a schedule for modifications that will bring the dairy facility into compliance. Certification that the modifications have been implemented shall be submitted to the Executive Officer within 30 days of completion of the modifications.
 - c. **Nutrient Management Plan:** The Discharger has submitted a Nutrient Management Plan that addresses the application of wastewater to land for nutrient recycling (See Attachment C). The Nutrient Management Plan must be certified as specified in Attachment C prior to the commencement of land application of solid waste and liquid wastewater. The Plan must be maintained at the dairy, submitted to the Executive Officer upon request and must ultimately provide for protection of both surface water and groundwater. The Nutrient Management Plan shall be updated as necessary or if the Executive Officer requests that additional information be included. Groundwater monitoring will be used to determine if implementation of the Nutrient Management Plan is protective of groundwater quality.

- d. **Other Reports:** Prior to commencement of dairy operations, the Discharger will provide:
 - i. A Nutrient Management Plan signed by an individual certified to prepare such plans;
 - ii. An Operation and Maintenance Plan as described in the Order.
- e. **Salinity Report:** The Discharger shall submit a report that identifies sources of salt in waste generated at the dairy, evaluates measures that can be taken to minimize salt in the dairy waste, and includes a commitment to implement measures identified to minimize salt in the dairy waste. If a third party (for example, the California Dairy Quality Assurance Program) produces an industry-wide report that is acceptable to the Executive Officer, the Discharger may refer to that report rather than generating his own report, but must certify that the appropriate measures will be implemented to reduce salt in his dairy waste.
- f. **Operation and Maintenance Plan:** The Discharger must produce an Operation and Maintenance Plan for the facility, which includes information pertaining to procedures the facility operates under during day to day management of the facility and in case of emergency situations. The Operation and Maintenance Plan shall be completed and employees trained on its contents prior to the commencement of dairy operations. The Operation and Maintenance Plan shall ensure that:
 - i. All precipitation and surface drainage from outside manured areas, including that collected from roofed areas, is diverted away from manured areas, unless such drainage is fully contained and is included in the storage requirement calculations;
 - ii. Ponds are managed to maintain the required freeboard and to prevent odors, breeding of mosquitoes, damage from burrowing animals, damage from equipment during removal of solids, embankment settlement, erosion, seepage, excess weeds, algae, and vegetation;
 - iii. Holding ponds provide necessary storage volume prior to winter storms (by November 1st at the latest), maintain capacity considering buildup of solids, and comply with the two (2) foot minimum freeboard required in the Order;
 - iv. There is no discharge of waste or storm water to surface waters from the production area;

- v. Procedures have been established for removal of solids from any lined pond to prevent damage to the pond liner;
- vi. Corrals and/or pens are maintained to collect and divert all wastewater to the retention pond and to prevent ponding of water and to minimize infiltration of water into the underlying soils;
- vii. The animal housing areas (such as barns, sheds, milk parlor, etc.) are maintained to collect and divert all water that has contacted animal wastes to the retention pond and to minimize the infiltration of water into the underlying soils;
- viii. Manure and feed storage areas are maintained to ensure that runoff and leachate from these areas are collected and diverted to the retention pond and to minimize infiltration of leachate from these areas to the underlying soils;
- ix. All dead animals are disposed of properly; and
- x. Chemicals and other contaminants handled at the facility are not disposed of in any manure or wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants;
- xi. All animals are prevented from entering any surface water within the confined area; and
- xii. Salt in animal rations is limited to the amount required to maintain animal health and optimum production.

G. Reporting Provisions

1. All annual reports or information submitted to the Board shall be signed and certified in accordance with C.7 and C.8 of the Standard Provisions.
2. The Discharger shall submit all reports as specified in the attached Monitoring and Reporting Program No. _____.
3. The Discharger shall furnish, within a reasonable time, any information the Board may request, to determine whether cause exists for modifying, revoking, and reissuing, or terminating this Order. The Discharger shall, upon request, also furnish to the Board copies of records required to be kept by this Order.
4. All reports prepared and submitted to the Executive Officer in accordance with the terms of this Order shall be available for public inspection at the offices of the Board.

H. Record Keeping

The Discharger shall create, maintain for five years, and make available to the Board upon request by the Executive Officer any reports or records required by this Order including those required under Monitoring and Reporting Program No. _____.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

PAMELA C. CREEDON, Executive Officer